## Certificate

## Passive House suitable component

For cool, temperate climates, valid until 31 December 2013

Category: Heat recovery unit

Manufacturer: Brink Climate Systems B.V.

7951 –DA Staphorst, NETHERLANDS

Product name: Renovent Excellent 400 4/0 (3/1) (Plus)

This certificate was awarded based on the following criteria:

Thermal comfort	$\Theta_{\text{supply air}} \ge 16.5  \text{°C}$ at $\Theta_{\text{outdoor air}} = -10  \text{°C}$
Effective heat recovery rate	η <sub>HR,eff</sub> ≥ 75%
Electric power consumption	P <sub>el</sub> ≤ 0.45 Wh/m³
Airtightness	Interior and exterior air leakage rates less than 3% of nominal air flow rate
Balancing and adjustability	Air flow balancing possible: yes Automated air flow balancing: yes
Sound insulation	Sound pressure level $L_p \le 35$ dB(A) based on a 4 m <sup>2</sup> equivalent absorption area not met Here $L_p = 51.5$ dB(A) Unit should be installed so that it is acoustically separated from living areas.
Indoor air quality	Outdoor air filter F7 Extract air filter G4
Frostprotection	Frost protection for the heat exchanger with continuous fresh air supply down to $\Theta_{\text{Outdoor air}} = -15  ^{\circ}\text{C}^{-1)}$

1) Only with additional anti freezing protection

Further information can be found in the appendix of this certificate.

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Certified for air flow rates of

77 - 290 m<sup>3</sup>/h

 $\eta_{\mathsf{HR},\mathsf{eff}}$ 

**84%** (88% bei 100 m³/h)

Electric power consumption

0.29 Wh/m<sup>3</sup>

